

CLEAN VERSION OF ALL PENDING CLAIMS

1. (Twice Amended) An apparatus, comprising:

a vacuum chamber wall defining a main cavity and an opening;

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an exhaust port in fluid connection with the main cavity for establishing a vacuum in the main cavity;

a cover for sealing the opening when the cover is supported by the chamber wall, comprising:

a first section adjacent to the main cavity, wherein the first section of the cover is supported by the chamber wall;

a second section on a side of the first section opposite of the main cavity, wherein the second section is supported by the first section;

a pocket between the first section and the second section; and

a critical element supported by a region of the first section and extending into the main cavity from the first section, wherein support of the second section by the first section is not above support of the critical element by the first section, wherein the pocket extends between the first section and the second section above the region of the first section upon which the critical element is supported, so that at least part of the first section is between the critical element and the pocket.

7. (Once Amended) The apparatus, as recited in claim 1, wherein the critical element is an electrode, and further comprising a channel extending from the main cavity to the pocket.

8. The apparatus, as recited in claim 7, further comprising a radio frequency power source electrically connected to the electrode.

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9. (Once Amended) The apparatus, as recited in claim 8, wherein the cover further comprises a vacuum tight seal between the first section and the second section, and a vacuum tight seal between the first section and the vacuum chamber wall.

10. The apparatus, as recited in claim 1, further comprising a channel extending between the pocket and the main cavity.

11. The apparatus, as recited in claim 10, wherein the pocket extends substantially across the opening.

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12. (Once Amended) The apparatus, as recited in claim 11, wherein the cover further comprises a vacuum tight seal between the first section and the vacuum chamber wall.

13. (Cancelled)

18. The apparatus, as recited in claim 1, wherein the second section is supported by the first section only where the first section is supported by the chamber walls.

19. The apparatus, as recited in claim 18, wherein the critical element is an electrode.

20. (Cancelled)

21. (Cancelled)

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22. (Once Amended) The apparatus, as recited in claim 1, wherein the critical element is an electrode and further comprising a radio frequency power source electrically connected to the electrode.

23. (Once Amended) An apparatus, comprising:

a vacuum chamber wall defining a main cavity and an opening;

an exhaust port in fluid connection with the main cavity for establishing a vacuum in the main cavity;

a cover for sealing the opening when the cover is supported by the chamber wall, comprising:

a first section adjacent to the main cavity, wherein the first section of the cover is supported by the chamber wall;

a second section on a side of the first section opposite of the main cavity, wherein the second section is supported by the first section only where the first section is supported by the chamber walls; and

a pocket between the first section and the second section;

a vacuum tight seal between the first section and the second section; and

a critical element supported by a region of the first section and extending into the main cavity from the first section, wherein the pocket extends above the region of the first section upon which the critical element is supported, so that at least part of the first section is between the critical element and the pocket.

24. The apparatus, as recited in claim 23, wherein the critical element is an electrode.

25. The apparatus, as recited in claim 24, further comprising a radio frequency power source electrically connected to the electrode.

26. The apparatus, as recited in claim 25, further comprising a channel extending between the pocket and the main cavity.

27. (Cancelled)

28. (Once Amended) The apparatus, as recited in claim 23, wherein the cover further comprises a vacuum tight seal between the first section and the vacuum chamber wall.

29. (New) The apparatus, as recited in claim 23, wherein the first section of the cover extends across the opening.

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30. (New) The apparatus, as recited in claim 23, wherein the first section separates the critical element from the pocket.

31. (New) The apparatus, as recited in claim 1, wherein the first section of the cover extends across the opening.

32. (New) The apparatus, as recited in claim 1, wherein the first section of the cover separates the critical element from the pocket.